

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

October 21, 2004

IN RE:

**NASHVILLE GAS COMPANY WEATHER
NORMALIZATION ADJUSTMENT AUDIT**

)
)
)
)
)

**DOCKET NO.
04-00185**

**ORDER ADOPTING WNA AUDIT REPORT OF THE ENERGY AND WATER
DIVISION OF THE TENNESSEE REGULATORY AUTHORITY**

This matter came before Chairman Pat Miller, Director Deborah Taylor Tate and Director Sara Kyle of the Tennessee Regulatory Authority (the "Authority"), the voting panel assigned to this docket, at a regularly scheduled Authority Conference held on July 26, 2004, for consideration of the Audit Report of the Authority's Energy and Water Division (the "Staff") resulting from the Staff's audit of Nashville Gas Company's ("Nashville Gas") Weather Normalization Adjustment ("WNA") for the period November 1, 2003 through March 31, 2004. The WNA Audit Report (the "Report"), attached hereto as Exhibit 1 and incorporated in this Order by this reference, reports two findings for the audit period under review. The Report was filed on July 12, 2004.

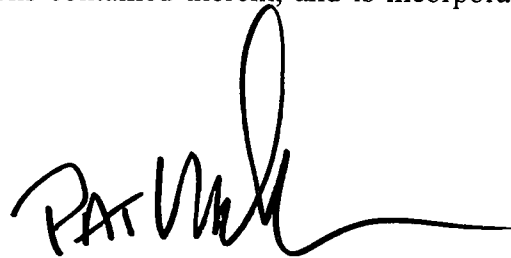
The first finding identified that the Company used incorrect actual degree days for two billing cycles in its calculations which resulted in an over-recovery of \$4,387.00. The Company agrees that incorrect degree days were entered in error. The second is that the Company used scheduled meter read dates versus actual meter read dates when reporting to Staff. This finding had no dollar impact, but addressed the Company's reporting process. The Company's response to this finding is that it will revise its schedule to reflect the actual meter read dates. The Report

states that the dollar findings are considered immaterial when compared with the total WNA revenue and that the Company is materially complying with the WNA rider.

After consideration of the Audit Report, the Authority unanimously approved the findings and recommendations contained therein.

IT IS THEREFORE ORDERED THAT:

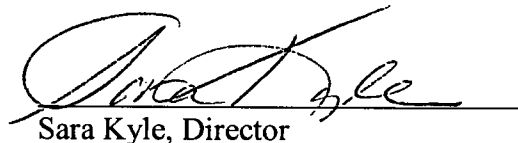
The Audit Report, a copy of which is attached to this Order as Exhibit 1, is approved and adopted, including the findings and recommendations contained therein, and is incorporated in this Order as if fully rewritten herein.

A handwritten signature in black ink, appearing to read "Pat Miller", written over a horizontal line.

Pat Miller, Chairman

A handwritten signature in black ink, appearing to read "Deborah Taylor Tate", written over a horizontal line.

Deborah Taylor Tate, Director

A handwritten signature in black ink, appearing to read "Sara Kyle", written over a horizontal line.

Sara Kyle, Director

RECEIVED

2004 JUL 13 PM 1:11

T.R.A. DOCKET ROOM

BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

July 12, 2004

IN RE:

**NASHVILLE GAS COMPANY, a Division of
PIEDMONT NATURAL GAS COMPANY
WEATHER NORMALIZATION ADJ. (WNA) AUDIT)**

Docket No. 04-00185

**NOTICE OF FILING BY ENERGY AND WATER DIVISION OF THE TENNESSEE
REGULATORY AUTHORITY**

Pursuant to Tenn. Code Ann. §§65-4-104, 65-4-111 and 65-3-108, the Energy and Water Division of the Tennessee Regulatory Authority (the "Energy and Water Division") hereby gives notice of its filing of the Nashville Gas Company WNA Audit Report in this docket and would respectfully state as follows

1 The present docket was opened by the Authority to hear matters arising out of the audit of Nashville Gas Company (the "Company").

2. The Company's WNA filings were received on November 1, 2003, through March 31, 2004, and the Staff completed its audit of same on June 30, 2004.

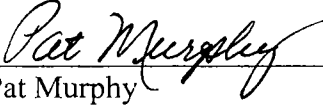
3 On July 1, 2004, the Energy and Water Division issued its preliminary WNA findings to the Company, and on July 7, 2004, the Company responded thereto

4 The preliminary WNA audit report was modified to reflect the Company's responses and a final WNA audit report ("The Report") resulted therefrom. The Report is

attached hereto as Exhibit A and is fully incorporated herein by this reference. The Report contains the audit findings of the Energy and Water Division, the Company's responses thereto and the recommendations of the Energy and Water Division in connection therewith

5 The Energy and Water Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the same.

Respectfully Submitted



Pat Murphy
Energy and Water Division of the
Tennessee Regulatory Authority

CERTIFICATE OF SERVICE

I hereby certify that on this 12th day of July 2004, a true and exact copy of the foregoing has been either hand-delivered or delivered via U S Mail, postage pre-paid, to the following persons.

Pat Miller
Chairman
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243

David R. Carpenter
Manager – Regulatory Projects
Piedmont Natural Gas Company
P.O. Box 33068
Charlotte, North Carolina 28233



Pat Murphy

COMPLIANCE AUDIT REPORT

OF

NASHVILLE GAS COMPANY

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

DOCKET NO. 04-00185

PREPARED BY

TENNESSEE REGULATORY AUTHORITY

ENERGY AND WATER DIVISION

JULY 2004

EXHIBIT A

COMPLIANCE AUDIT
NASHVILLE GAS COMPANY
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER
Docket No. 04-00185

TABLE OF CONTENTS

	<u>PAGE NO.</u>
I. Introduction	1
II. Scope of Audit	1
III Background Information on Nashville Gas Company	1
IV Background on Weather Normalization Adjustment (WNA) Rider	2
V. Impact of WNA Rider	4
VI WNA Findings and Conclusions	5

COMPLIANCE AUDIT
NASHVILLE GAS COMPANY
WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

I. INTRODUCTION

The subject of this compliance audit is the Weather Normalization Adjustment (WNA) Rider of Nashville Gas Company (hereafter "NGC" or the "Company"), a division of Piedmont Natural Gas Company. The objective of this audit is to determine if the WNA adjustments were calculated correctly and applied to customers' bills appropriately between November 1, 2003 and March 31, 2004. As a result of the WNA Rider, the Company surcharged a net \$1,135,064 and \$636,702 to the residential and commercial customers respectively during the period. The impact of WNA revenues on the Company's total revenues is detailed in Section V.

The Staff's audit results produced two findings for the audit period under review. Except for the findings reported in Section VI, Staff concludes that the Company is correctly implementing the mechanics of the WNA Rider as specified by the Tennessee Regulatory Authority ("TRA" or the "Authority") and included in the Company's tariff. (See Attachment 1)

II SCOPE OF AUDIT

In meeting the objective of the audit, the Staff compared the following on a daily basis: 1) the Company's actual heating degree days to National Oceanic and Atmospheric Administration (NOAA) actual heating degree days; 2) the Company's normal heating degree days to the normal heating degree days calculated in the last rate case, and 3) the Company's calculation of the WNA factor to Staff's calculation. The Staff also audited a sample of customers' bills during the WNA period to verify that the WNA factor had been correctly applied to the bills.

Pat Murphy and Butch Phillips of the Energy and Water Division conducted this audit.

III. BACKGROUND INFORMATION ON NASHVILLE GAS COMPANY

Nashville Gas Company, with headquarters at 665 Mainstream Drive, Nashville, Tennessee, is an operating division of Piedmont Natural Gas Company, which has its headquarters at 1915 Rexford Road, Charlotte, North Carolina. NGC is a gas distributor that provides service to several communities in the Middle Tennessee area. The natural gas used to serve these areas is purchased from producers and marketers and transported to Nashville's city gate through the interstate transmission facilities of Tennessee Gas Pipeline (TGP), Columbia Gas Transmission Corporation (CGTC), and Texas Eastern Gas Pipeline (TETCO).

IV. BACKGROUND ON WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

In its September 26, 1991 Order in Docket 91-01712, the Tennessee Regulatory Authority, formerly the Tennessee Public Service Commission, approved a three year experimental Weather Normalization Adjustment (WNA) Rider to be applied to residential and commercial customers' bills during the months of October through May of each year (See Attachment 1). In its June 21, 1994 order, the TRA adopted the WNA Rider as a permanent rule, to be applied November through March of each year for Nashville Gas Company.

In setting rates, the Tennessee Regulatory Authority uses a normalized level of revenues and expenses for a test year, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are to be in effect. Use of normalized operating levels eliminates unusual fluctuations that may occur during the test period, which causes rates to be set too high or too low

Specifically, one part of normalizing revenues consists of either increasing or decreasing the test year weather related sales volumes to reflect the difference between the normal and actual heating degree days. (A heating degree day is calculated as the difference in the average daily temperature and 65 degrees Fahrenheit.) This average daily temperature constitutes normal weather and is determined based on the previous thirty years weather data.

However, normal weather rarely occurs. This has two impacts:

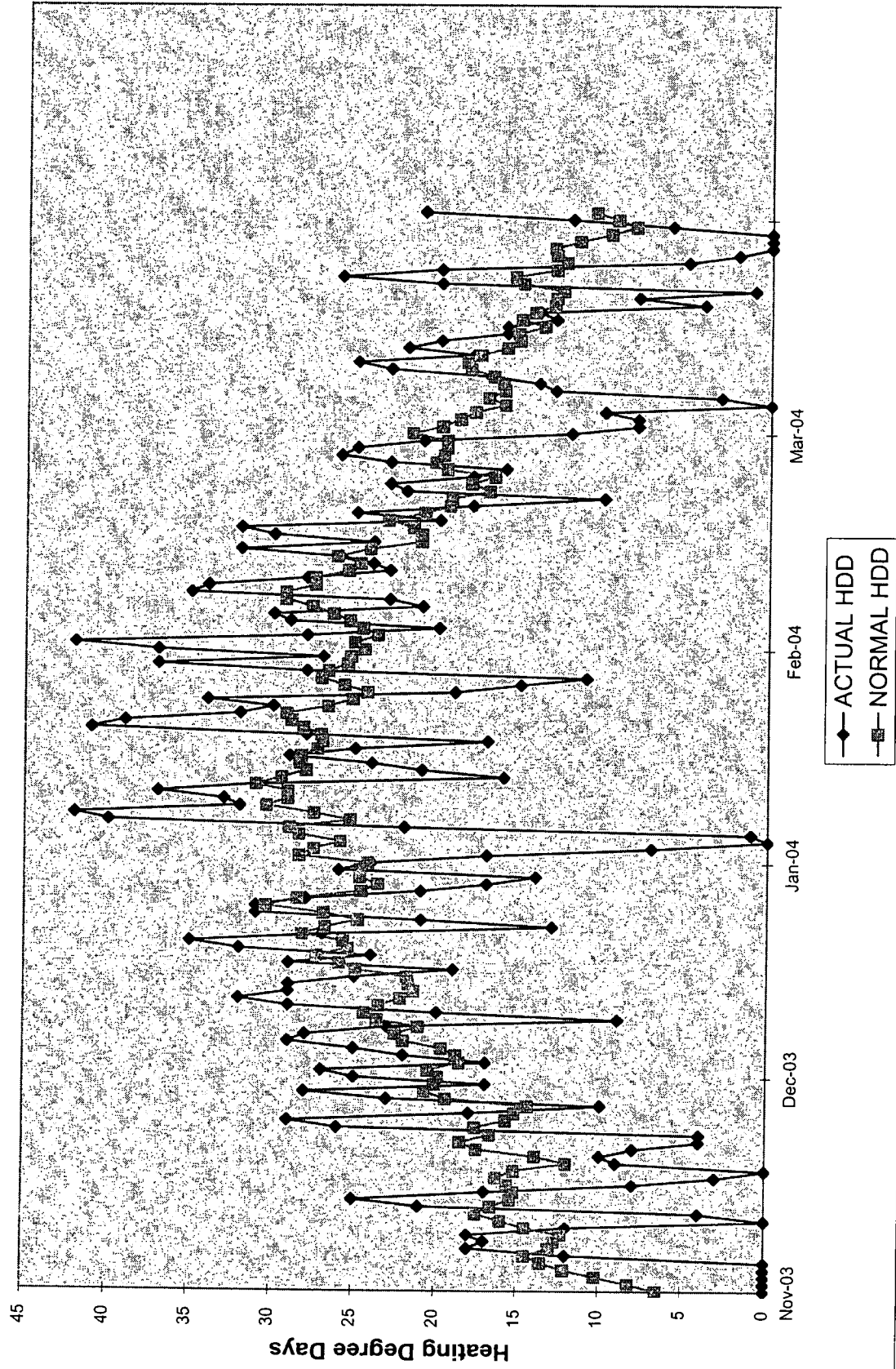
- 1) The customers' bills fluctuate dramatically due to changes in weather from month to month; and
- 2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and overearnings for the company. On the other hand, if weather is warmer than normal, less gas than anticipated in the rate case will be sold, the customers' bills will be lower and the company will underearn.

In recognition of this fact, the TRA approved a WNA mechanism to reduce the impact abnormal weather has on the customers' bills and on the gas utilities' operations. In periods of weather colder than normal, the customer receives a credit (refund) on his bill, while in periods of warmer than normal weather, the customer is billed a surcharge. Thus, customers' monthly bills should not fluctuate as dramatically and the gas company should have a more stable rate of return.

The graph (found at the end of this section) compares the actual heating degree days to normal heating degree days for Nashville Gas during the 2003 - 2004 heating season. It shows that in all months, except December 2003 and February 2004, the weather (overall) was warmer than normal, resulting in a net surcharge from Nashville Gas to its customers for the period. The table below quantifies the number of actual heating degree days by month as compared to the normal heating degree days for that month

Month	Actual Heating Degree Days	Normal Heating Degree Days	Warmer/Colder than Normal
November 2003	341	447	Warmer
December 2003	761	738	Colder
January 2004	814	849	Warmer
February 2004	686	639	Colder
March 2004	356	463	Warmer
Total	2,958	3,136	Warmer

Nashville Gas Company
Comparison of Actual to Normal Heating Degree Days
Nashville Weather Station



V. IMPACT OF WNA RIDER

Since the overall weather during the November 1, 2003 through March 31, 2004 period was warmer than normal, the net impact of the WNA Rider was that residential and commercial customers were **surcharged** \$1,135,064 and \$636,702 respectively. This equates to increases in revenues from residential and commercial sales of 1.35% and 1.23% respectively. (See Table 1) This is an increase from the previous year when the residential and commercial customers were **refunded** \$2,415,614 and \$1,399,730 respectively (See Table 2)

Table 1

Impact of WNA Rider on Residential & Commercial Revenues November 1, 2003 - March 31, 2004

	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider On Revenue</u>
Residential Sales	\$ 1,135,064	\$ 83,968,042	1.35%
Commercial Sales	<u>636,702</u>	<u>51,755,296</u>	1.23%
Total	<u>\$ 1,771,765</u>	<u>\$ 135,723,338</u>	1.31%

Table 2

Amount Surcharged (Refunded) 2001 - 2004

	<u>Residential</u>	<u>Commercial</u>	<u>Total Surcharge/Refund</u>
11/01-3/02	\$ 2,241,280	\$ 1,324,668	\$ 3,565,948
11/02-3/03	-2,415,614	-1,399,730	-3,815,344
11/03-3/04	<u>1,135,064</u>	<u>636,702</u>	<u>1,771,765</u>
Total	<u>\$ 960,730</u>	<u>\$ 561,640</u>	<u>\$ 1,522,369</u>

VI. WNA FINDINGS AND CONCLUSIONS

As noted in Section I of this report, Staff had two findings for the audit of the period November 2003 through March 2004. The first finding identified that the Company used incorrect actual degree days for two billing cycles in their calculations which resulted in a slight over-recovery. The second finding had no dollar impact, but addressed the Company's reporting process.

These dollar findings are considered immaterial when compared with the total WNA revenue and Staff believes that the Company is materially complying with the WNA Rider.

FINDING #1:

Exception:

The Company used incorrect actual degree days in its weather normalization calculation.

Discussion:

The Company overstated the actual degree days by ten on December 23, 2003 and understated the actual degree days by ten on December 25, 2003 used in its WNA calculations. The net result of these errors was an over-recovery of \$4,387.00 in WNA revenues for two cycles, one in the December 2003 and one in the January 2004.

The days involved were

Date	Daily Degree Days Used By Company	Daily Degree Days As Published by NOAA	Degree Day Difference
12/23/03	31	21	-10
12/25/03	21	31	+10

Since the dollar amount of this finding is immaterial on a by customer basis, Staff recommends including the over-recovery in the Company's next Actual Cost Adjustment filing.

Company Response

The Company agrees that the degree days were entered in error as stated by the TRA Staff for the 2 days referenced.

FINDING #2:**Exception:**

The Company used scheduled meter read dates versus actual meter read dates when reporting to the Staff.

Discussion:

During the winter heating season, the Company reported to the Staff its scheduled meter read dates for the WNA period, rather than the actual dates the meters were read. While the WNA factors calculated by the Company for each billing cycle (except for those noted in Finding No. 1) were correct, Staff could not verify the factors based on the read dates reported to them. Upon Staff's request, the Company revised its schedule to reflect the actual meter read dates. In future audit periods, the Company should always report actual read dates.

Company Response

The monthly WNA reports are a summary of WNA activity for each month during the winter season. The data is supplied based on scheduled read dates. Actual read dates within each cycle may vary depending upon weather and other factors affecting the meter reading activity. Upon Staff's request, the Company revised their schedule to reflect the actual meter read dates.

SERVICE SCHEDULE NO. 315

Weather Normalization Adjustment

(WNA) Rider

I. Provision for Adjustment

The base rates per therm (100,000 Btu) for gas service set forth in any rate schedules utilized by the Authority in determining normalized test period revenues shall be adjusted by an amount hereinafter described, which amount is referred to as the "Weather Normalization Adjustment".

The Weather Normalization Adjustment will be applicable for bills rendered on and after November 1 and continuing through the final billing cycle in March of each year

II. Definitions

For the purposes of this Rider:

"Authority" means the Tennessee Regulatory Authority.

"Relevant Rate Order" means the final order of the Authority in the most recent litigated rate case of the Company fixing the rates of the Company or the most recent final order of the Authority specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

III. Computation of Weather Normalization Adjustment

The Weather Normalization Adjustment shall be computed to the nearest one-hundredth cent per therm by the following formula:

$$WNA_i = R_i \quad * \quad \frac{(HSF_i(NDD-ADD))}{(BL_i + (HSF_i \times ADD))}$$

Where:

- I = any particular rate schedule or billing classification within any particular rate schedule that contains more than one billing classification.
- WNA_i = Weather Normalization Adjustment Factor for the i^{th} rate schedule or classification expressed in cents per therm.
- R_i = weighted average base rate (base rate less any embedded gas cost) of temperature sensitive sales for the i^{th} schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues.

- HSF_i = heat sensitive factor for the i^{th} schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues.
- NDD = normal billing cycle heating degree days utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues.
- ADD = actual billing cycle heating degree days.
- BL_i = base load sales for the i^{th} schedule or classification utilized by the Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

IV. Filing with Authority

The Company will file as directed by the Authority (a) a copy of each computation of the Weather Normalization Adjustment, (b) a schedule showing the effective date of each such Weather Normalization Adjustment, and a schedule showing the factors or values derived from the Relevant Rate Order used in calculating such Weather Normalization Adjustment.

Addendum to TRA Service Schedule No. 315

Piedmont Natural Gas Company, Inc. Calculation of Factors for WNA Computations DOCKET NO. 03-00313

	Base Rate (\$/therms)	Demand (\$/therms)	Commodity (\$/therms)	"R" Value (\$/therms)	Heat Factor (therms/DDD)	Base Factor (therms/mo)
Residential						
Standard Rate	1.04802	0 05994	0.66808	0 32000	0.15957	3 91564
Value Rate	1 01008	0 02200	0 66808	0 32000	0.21337	23 08653
Commercial						
Rate 302	1.08202	0.05994	0 66808	0 35400	0.79247	0.675169
Rate 332						
first 2,000 therms	1 04408	0.02200	0.66808	0 35400	0 5184	486.2211
over 2,000 therms	1.03308	0 011	0 66808	0 35400	0 5184	486 2211
Rate 352	1 04408	0.02200	0 66808	0.35400	17.6718	2229 5876
Rate 362						
first 5,000 therms	1.04408	0.02200	0.66808	0 35400	5 36775	6229 7053
over 5,000 therms	1 03308	0.011	0 66808	0 35400	5 36775	6229 7053